## U.S. ENVIRONMENTAL PROTECTION AGENCY

## Office of Water Office of Science and Technology Health and Ecological Criteria Division

## REQUEST FOR APPLICATIONS: "NUTRIENT CRITERIA DEVELOPMENT"

## **OVERVIEW INFORMATION**

This is a request for proposals (RFP) for the Office of Water (OW), Office of Science and Technology (OST), Health and Ecological Criteria Division (HECD), Ecological and Health Processes Branch (EHPB) - Nutrient Criteria Program. This action announces the availability of funds, under Statutory Authority of Section 104(b)(3) of the Clean Water Act, which authorizes federal assistance agreements for conducting or promoting the coordination and acceleration of research, investigations, experiments, surveys and studies relating to the cause, effects, extent, prevention and elimination of nutrient related pollution. This announcement pertains to all EPA Regions, except EPA Region IX, which will continue studies through contract mechanisms.

This assistance program is described in the **Catalog of Federal Domestic Assistance** Section 66.436.

### **DATES**

Opening Date: April 29, 2005 Closing date: June 11, 2005

All proposals must be submitted to EPA Headquarters at the address shown below by midnight, June 11, 2005. Proposals postmarked and received after the deadline will not be considered.

Because of security concerns, applications

cannot be personally delivered. They must be sent through regular mail, express mail, or a major courier. Additionally, applicants must provide an e-mail address where they can be notified of receipt of their application

# Section I. FUNDING OPPORTUNITY DESCRIPTION

The outcomes of each grant must clearly demonstrate compliance with the EPA Strategic Plan. EPA's Strategic plan has several goals, one of which is to improve water quality on a watershed basis. Specifically, under EPA's Government Performance and Results Act goals, this solicitation is in support of EPA's subobjective (2.2.1) which measures the cumulative number of States that have adopted EPA approved nutrient criteria into their water quality standards for fresh water (rivers/streams, lakes and reservoirs). Outcomes of this solicitation must directly support the development of nutrient criteria for the state, Tribal government, or EPA Region in which the applicant is working. The outcomes then from the following list of potential outputs will be consistent with the EPA Strategic Plan Subobjective 2.2.1, and will help to improve water quality on a watershed basis with respect to nutrients.

Grantees can demonstrate that their outcomes comply with this goal through developing the following types of outputs: (1) Reports on data collection and processing to support nutrient reference condition

determination and criteria development, especially to refine TN, TP, Chlorophyll-a, and water clarity databases; (2) Reports compiling nutrient data collected for freshwater, estuarine/coastal and wetland systems to better understand the complex relationships among nutrient loading and physical and biological responses of water bodies; (3) Recommendations on refinement of EPA's nutrient criteria recommendations, which were announced in January 2001/February 2002, based on local ambient conditions/ waterbody types/designated uses; and (4) Recommendations on how states and Tribes may characterize the relationship between nutrient levels and biotic responses to set nutrient criteria.

#### Section II. AWARD INFORMATION

For this competition, the Program anticipates awarding grants, contracts, or inter-agency agreements to carry out studies. Grants will be awarded under 104(b)(3) of the Clean Water Act. Awards will range from approximately \$20,000 to a maximum of \$80,000 per project, with performance periods extending from 12 to 24 months.

Projects selected for award must be executed such that no population is subjected to unjust or disproportionate environmental impacts and risks are not shifted from one population to another.

# Section III. ELIGIBILITY INFORMATION

## **Eligible Applicants:**

Agencies and organizations selected for funding will be knowledgeable in the areas of water quality data analyses and data management.

State water pollution control agencies, Federally recognized Indian Tribal Governments, institutions of higher education, interstate agencies, and other public or nonprofit private agencies, institutions, organizations and individuals are eligible to apply for this program. Non-profits must be a 501(c)(3) organization.

CFDA 66.436 lists the following eligible applicants: States, territories, Indian Tribes, and possessions of the U.S., including the District of Columbia, public and private universities and colleges, hospitals, laboratories, other public or private nonprofit institutions and individuals.

## **Cost Sharing**

There are no cost-sharing or matching requirements.

## Other

Recipients of Federal funds are encouraged to familiarize themselves with the regulations applicable to assistance agreements found in the Code of Federal Regulations (CFR) Title 40, Part 30 for non-profit organizations and institutions of higher education group, and Part 31 for State and local government entities (see <a href="http://www.epa.gov/docs/epacfr40/chapt-l.info/subch-B.htm">http://www.epa.gov/docs/epacfr40/chapt-l.info/subch-B.htm</a>. Copies of the CFR Title 40, Part 30 and Part 31 may be obtained at your local U.S. Government Bookstore, or through the U.S. Government Printing Office at: <a href="http://www.gpo.gov/">http://www.gpo.gov/</a>.

In accordance with Federal statutes and regulations and EPA policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, denied the benefits of, or be

subjected to discrimination under any program or activity receiving financial assistance from the Environmental Protection Agency.

EPA reserves the right to reject all proposals or applications and make no awards.

#### **OVERVIEW**

In June 1998, EPA developed a National Strategy for the Development of Regional Nutrient Criteria which provided for expanded efforts to reduce nutrient enrichment of the Nation's waters. One goal of the Strategy, which is being implemented in part through these grants, is to stimulate research by a wide range of organizations and individuals that will enhance State and Tribal understanding of relationships among nutrient causal and response variables. Another goal is the development of ecoregional numeric nutrient criteria and standards by waterbody type (e.g., streams, estuaries, wetlands) for States and Tribes to use in their water quality protection programs. This RFA is intended to support these efforts.

Over the past six years, the National Nutrient Program has committed approximately 7 million dollars for the collection of nutrient data primarily from rivers, streams, lakes, and reservoirs. These funded projects are expected to provide the States with necessary information to establish nutrient criteria. In an effort to ensure that all waterbody types are covered, this year EPA is expanding its focus to fund projects that stimulate activities related to the generation and compilation of wetland and estuarine/coastal data, as well as projects that perform analyses on data previously collected for lakes, reservoirs, and streams.

In a separate effort, EPA has developed National nutrient criteria technical guidance manuals for lakes and reservoirs (completed 4/2000), rivers and streams (completed 7/2000), estuaries and coastal waters (completed October 2001), and wetlands (final Draft in December 2003) [www.epa.gov/OST/standards/nutrient.html]. States/Tribes may use these documents when developing criteria which can form the basis of water

quality standards. National criteria specific to Omernik's Level III ecoregions and aggregations of level III ecoregions (nutrient ecoregions) have been derived using causal (e.g., total nitrogen and total phosphorus concentrations) and response data (e.g., chlorophyll a concentrations and water clarity measurements) contained in existing databases such as STORET, and USGS databases such as NAWQA, HBN, NASQAN and NWIS. Nutrient criteria for lakes/reservoirs and rivers/streams have been developed by the Agency for all 14 nutrient ecoregions. Seventeen ecoregional nutrient documents were published in January 2001, nine more documents were published in February 2002, and three remain to be completed. The 26 completed documents result in criteria coverage of over 95% of the Nation's freshwaters (excluding wetlands). These documents are also on the nutrient website. EPA recommends that States and Tribes use EPA's criteria as a starting point toward developing more refined criteria. Refined criteria may consider several elements such as waterbody classification, more localized water body conditions, historical trends, downstream uses, and specific uses within a waterbody/watershed.

EPA expects that States and Tribes will want to use the waterbody type guidance documents and nutrient criteria reference conditions as a guide in developing their own numeric levels for nutrients that support the designated uses of the waterbody as part of State and Tribal water quality standards.

In order to develop ecoregional criteria, it may be necessary for States and Tribes to compile and analyze existing, often disparate, data sets. In some cases, new data must be collected to properly assess waterbody conditions relative to nutrient loadings. EPA is proposing to stimulate the collection of these data through financial assistance to eligible organizations and individuals.

EPA has developed a National database application to compile and analyze the data collected under previously awarded grants/cooperative agreements. The database application can facilitate the sharing of data within nutrient ecoregions which cross multiple State/Tribal boundaries. Thus, State/Tribal agencies with limited or no nutrient data may utilize data collected by other sources within their ecoregion to establish criteria. EPA is specifying uniform data collection and data format methods to ensure that data meet rigorous quality assurance requirements needed for criteria calculations and that the database application maintains consistency for State/Tribal users. See Quality Assurance Procedures in Section IV.B. -Organization Overview, below.

## Section IV. APPLICATION & SUBMISSION INFORMATION

Either two hard copies (One signed original) or an electronic version (WordPerfect or compatible software) of each proposal must be submitted to the Office of Water/Office of Science and Technology/Health and Ecological Criteria Division, by midnight, June 11, 2005.

The following address must be used for regular mail:

Amy Parker, PhD
National Nutrient Program Manager
US EPA/Office of Water (4304T)
1200 Pennsylvania Ave. N.W.
Washington, DC 20460
The following address must be used for express mail and couriers:

Amy Parker, PhD
National Nutrient Program Manager
U.S. Environmental Protection Agency
Connecting Wing/EPA West (MC: 4304T)

Rm: 7233FF 7<sup>th</sup> Floor Connecting Wing 1301 Constitution Ave., NW Washington, DC 20460

Electronic applications should be sent to: <a href="mailto:parker.amy@epa.gov">parker.amy@epa.gov</a>. Applicants who experience technical difficulties submitting applications electronically should call Amy Parker on (202) 566-1341 for alternative submission procedures.

Applicants must identify the Regional Office that reviews their application. Information regarding Regional Offices is available at http://www.epa.gov/waterscience/criteria/nutrient/co ord.html. The following webpage will show you which EPA Regional Office you should submit your application to:

## http://www.epa.gov/epahome/locate2.htm

For questions about which Regional Office should be identified, please contact Amy Parker at the e-mail address or phone number listed above.

The Health and Ecological Criteria Division will log in receipt and then forward applications to the appropriate Regional Nutrient Coordinators (See Section VII for a list of Regional Nutrient Coordinators) who will evaluate proposal and make award decisions.

## A. Address to Request Application.

The Application Kit for Federal Assistance is available at

http://www.epa.gov/ogd/grants/how to apply.htm
This website explains how to complete SF-424A
Budget Forms and describes cost principles for a
Federal grant. Requests for application kits must
be submitted to the Environmental Protection
Agency, Grants Administration Division, 3903R,
Washington, DC 20460 or through the appropriate
EPA Regional Office listed in section VII.

## **B.** Content and Form of Application Submission

All applications will be reviewed. However, EPA requests that proposals not exceed eight (8) numbered (bottom center), 8.5 x 11-inch pages of single space, standard 12-point type with 1-inch margins (excluding the budget and resumes) and should be structured according to the following annotated outline

## **Organization Overview:**

- I. Table of contents.
- II. One brief paragraph identifying the organization and its water quality/data analysis experience.

Applicants must include information on their past performance and reporting history on prior/current federal and/or non federal projects similar in size, scope and relevance to the proposed project. Applicants without any relevant past performance and/or reporting history will receive a neutral score for those factors.

When conducting the programmatic capability evaluation, the Agency will consider the information submitted by the applicant and may consider relevant information from other sources including Agency files. Accordingly, the applicant's programmatic capability evaluation and score may be based on the information submitted in the proposal/application, the Grantee Compliance Database and other available relevant information.

- III. Names, phone numbers, business addresses, e-mail addresses, and one page abstracted resumes for Principle Investigator(s) and key associates.
- IV. Abstract, limited to one page.
- V. Project Description:
- A. Detailed description of the project:
- 1. How the project will further the objectives described previously in section I in this request for applications.
- 2. Expected products including a plan for tracking and measuring their progress toward achieving the expected environmental outputs/outcomes identified in Section I of the announcement.
- 3. Benefits of the project results or products to the applying organization, to state or tribal agencies, other stakeholders or to the citizens or public at large.

## VI. Project Schedule:

A. Show significant steps and milestones in the project.

- 1. Project's duration,
- 2. Key milestones,
- 3. Project tasks,
- 4. Role and tasks of each team member.

## VII. Data Gathering

A. If new data are to be collected, proposals must include:

- 1. A brief summary of proposed sampling design, sampling techniques, and analytical methods;
- 2. A brief description of data format (e.g., software, data storage and retrieval system, hardcopy storage on standard data sheets);
- 3. The name, address, and phone number of the facility or facilities keeping these records:
- 4. The name, business address, and phone number of the individual who will be responsible for the data retrieval, analyses, and submission of information;
- 5. A description of whether any new data collected will be combined with existing data. (EPA decided to use only data from 1990 to the present to populate the National Nutrient Database because of methodological concerns prior to 1990. For the purposes of data analysis, applicants should describe how they will address problems of methodological inconsistencies if data collected before 1990 will be included in any analysis of data collected after 1990.)

### VIII. Collaborations:

Discuss the project partners, their knowledge and expertise, and their roles in the project.

## IX. Transferability:

Discuss plan for transferring the lessons learned and - or results of this project to other cities, states, or industries. This may include, but is not limited to workshops, websites, and reports.

## X. Quality Assurance Procedures:

For any projects involving data collection or processing, conducting surveys, environmental measurements, modeling, or the development of environmental technology provide a brief (two to three paragraphs) statement of quality assurance procedures which will be used in constructing or transcribing data submitted. A fully developed quality assurance project plan (QAPP) will be required to be developed and approved prior to initiation of any sampling for those projects that are awarded. Regulations pertaining to QA/QC requirements can be found in 40 CFR Parts 30.54 and 31.45. Additional guidance can be found at http://www.epa.gov/quality/qa\_docs.ht ml#noepargt

## XII. Budget (Standard form 424):

The total funding requested and a budget describing how the requested funds will be spent. It is anticipated that most support will pay the costs of data collection, information retrieval, and transcription by a data analyst. The Standard Form 424 can be obtained at

http://www.whitehouse.gov/omb/grants/sf4 24.pdf.

Applicants are advised to clearly mark any information they consider to be confidential. EPA will make final confidentiality determinations in accordance with Agency regulations at 40 CFR Part 2, Subpart B.

## C. Submission Date and Time

Applications must be submitted to the addresses listed above, in Section IV, by midnight, June 11, 2005. Applications submitted after the deadline will not be considered.

## **D.** Intergovernmental Review

The funds associated with this announcement require Executive Order (E.O.) 12372, "Intergovernmental Review of Federal Programs", review. E.O. 12372 structures the federal government's system of consultation with states and local governments on its decisions involving grants, other forms of financial assistance, and direct development. Under E.O. 12372, states, in consultation with their local governments, design their own review process and select the federal financial assistance and direct development activities they wish to review. If selected for funding, the recipient of the federal assistance agreement will be required to send a copy of their application and proposal to the appropriate State Clearinghouse Office for an intergovernmental review, if applicable. (See: http://www.whitehouse.gov/omb/grants/spoc.html)

For a list of the State Single Point of Contact (SPOC) go to: <a href="http://www.whitehouse.gov/omb/grants/spoc.html">http://www.whitehouse.gov/omb/grants/spoc.html</a> to see if your state requires recipients to provide a copy of their proposal to their State Point of Contact for review.

## **E. Funding Restrictions:**

Construction is not an allowable activity, foreign travel is not permissible, equipment purchases require written permission by the EPA project officer if they were not included in the approved application.

Regulations pertaining to QA/QC requirements can be founds in 40 CFR Parts 30.54 and 31.45. Additional guidance can be found at:

http://www.epa.gov/qulaity/qa docs.html#noeparqt

Pre-award costs will not be reimbursed.

## F. Other Submission Requirements

See the website for the Application Kit, which contains all submission format requirements:

http://www.epa.gov/ogd/grants/how\_to\_apply.htm.

Grant applicants will be required to provide a Dun and Bradstreet (D & B) Data Universal Numbering System (DUNS) number when applying for Federal grants or cooperative agreements. Organizations can receive a DUNS number in one day, at no cost, by calling the dedicated toll-free DUNS Number request line at 1-866-705-5711 or by visiting <a href="https://www.dnb.com.">www.dnb.com</a>.

## **Publications:**

An assistance agreement recipient must agree to provide copies of any peer review journal article(s) resulting from work during the project period. In addition, the recipient should notify the EPA project Officer of any papers published after completion of the assistance agreement which were based on work supported by the assistance agreement. Any documents developed under the agreement

for distribution to the public or inclusion in a scientific, technical, and other journal shall include the following statement:

This publication(article) was developed under EPA Assistance Agreement No. \_\_\_\_\_.

It has not been formally reviewed by EPA. The views expressed in this document are solely those of (name of recipient) and the EPA does not endorse any products or commercial services mentioned in this publication.

#### **G.** Confidential Business Information

EPA recommends that no confidential business information be included in proposals. However, in accordance with 40 CFR 2.203, applicants may claim all or a portion of their application/proposal as confidential business information. EPA will evaluate confidentiality claims in accordance with 40 CFR Part 2. Applicants must clearly mark applications/proposals or portions of applications/proposals they claim as confidential. If no claim of confidentiality is made, EPA is not required to make the inquiry to the applicant otherwise required by 40 CFR 2.204(c)(2) prior to disclosure.

## V. APPLICATION REVIEW INFORMATION

## Criteria:

EPA will evaluate proposals based on their scientific merit and ensure that the applicant is responsive to State and Tribal scientific needs, especially when a State and EPA have a mutually agreed upon nutrient criteria development plan, and has addressed quality assurance/quality control issues (see Evaluation Criteria below).

Applications will be ranked on the basis of the evaluation criteria listed below. Ranking for each criterion is based on a scale of 0 (does not meet the requirement) to 5 (exceeds the requirement).

- Expertise in collection of data to analyze and predict nutrient and algal relationships in lakes and reservoirs, and rivers and streams.
- Familiarity with local waterbody types (i.e., lakes and reservoirs, rivers and streams, ).
- Organization experience and plan for timely and successfully achieving the objectives of the project,
- Staff expertise/qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the project.
- Cost effectiveness and reasonableness of the proposal.
- Thoroughness of the applicants plan for tracking and measuring its progress toward achieving the expected outputs/outcomes identified in Section I of the announcement.

## VI. AWARD ADMINISTRATION INFORMATION

#### **Award Notices:**

Successful applicants will receive a notice of award through postal mail within 90 days of receipt of the application. The notice of award signed by the grants officer (or equivalent) is the authorizing document, and will be mailed to the individual signing the original application.

# Administrative and National Policy Requirements:

Please see the Grants Administration Division website samples of EPA's terms and conditions for administrative and national policy requirements:

www.epa.gov/ogd/grants

## **Dispute Resolution:**

Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) which can be found at:

http://a257.g.akamaitech.net/7/257/2422/01jan200 51800/edocket.access.gpo.gov/2005/05-1371.htm. Copies of these procedures may also be requested by contacting Amy Parker at the phone or e-mail address listed in Section IV.

## **Non-Profit Applicants:**

Non-Profit applicants that are recommended for funding will be subject to preaward administrative capability reviews consistent with Sections 8.b, 8.c, and 9.d of EPA order 5700.8

http://www.epa.gov/ogd/grants/award/5700\_8.pdf

## Reporting:

In negotiating these grants, EPA will work closely with recipients to incorporate appropriate performance measures and reporting requirements into each grant agreement consistent with 40 CFR 30.51, 31.40, 35.115, and 35.515. These regulations provide some flexibility in determining the appropriate content and frequency of performance reports, depending on the complexity of the project. At a minimum, however, the reporting schedule must require the recipient to report at least annually.

#### **Data Access and Information Release:**

The Office of Management and Budget (OMB) Circular A-110 has been revised to provide public access to data through the Freedom of Information Act (FOIA) under some circumstances. Data that are (1) first produced in a project that is supported in whole or in part with Federal funds, and (2) cited publicly and officially by a Federal Agency in support of an action that has the force and effects of law (i.e., regulation) may be accessed through FOIA. All data sets, models and databases may become accessible to the pubic and therefore freely available to all researchers. If such data are requested by the public, the EPA must allow for it, and the grantee must submit it, in accordance with A-110 and EPA regulations at 40 C.F.R. 30.36.

## VII. AGENCY CONTACTS

# REGIONAL NUTRIENT COORDINATORS

EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)

## **Matt Liebman**

liebman.matt@epa.gov US EPA New England One Congress Street, Suite 1100 (CWQ) Boston, MA 02114-2023 (617) 918-1626 (617) 918-1505 FAX

EPA Region 2 (New York, New Jersey, Puerto Rico, Virgin Islands)

## Wayne Jackson

jackson.wayne@epa.gov USEPA, Region 2 290 Broadway, 24th Floor New York, NY 10007-1866 (212) 637-3807 (212) 637-3526 FAX

EPA Region 3

(Delaware, Maryland, Pennsylvania, Virginia, West Virginia,)

**Tiffany Crawford** 

crawford.tiffany@epa.gov US EPA Region III 1650 Arch Street Philadelphia, PA 19103 (215) 814-5776 (215) 814-5103 FAX

EPA Region 4

(Alabama, Georgia, Florida, Mississippi, Kentucky, North Carolina, South Carolina, Tennessee)

**Ed Decker** (404) 562-9383 decker.ed@epa.gov, OR

(404) 562-9271 Jim Harrison

harrison.jim@epa.gov (404) 562-9224 FAX US EPA - Region 4 (WMD/SMTB) Atlanta Federal Center 61 Forsyth Street, S.W. Atlanta, Georgia 30303-8960

EPA Region 5

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

**Dave Pfeifer** (312) 353-9024 pfeifer.david@epa.gov

**Candice Bauer** (312) 886-4012

bauer.candicer@epa.gov US EPA - Region 5 Water Quality Standards 77 W. Jackson Blvd Chicago, IL 60604-3507 (312) 886-0168 FAX

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas)

**Phil Crocker** 

crocker.philip@epa.gov US EPA - Region 6 Fountain Place, 12<sup>th</sup> floor, Suite 1200 1445 Ross Avenue Dallas, TX 75202-2733 (214) 665-6644 (214) 665-2146 FAX

EPA Region 7

(Iowa, Kansas, Missouri, Nebraska)

Gary Welker

welker.gary@epa.gov US EPA - Region 7 901 N. 5<sup>th</sup> Street Kansas City, KS 66101 (913) 551-7177 (913) 551-8752 FAX

**EPA Region 8** 

(Colorado, Montana, North Dakota, South

Dakota, Utah, Wyoming)

**Kathryn Hernandez** 

hernandez.kathryn@epa.gov US EPA - Region 8 999 18th Street, Suite 300 Denver, CO 80202-2466 (303) 312-6101

(303) 312-6339 FAX

EPA Region 9

(Arizona, California, Hawaii, Nevada)

**Suesan Saucerman** 

saucerman.suesan@epa.gov US EPA - Region 9 75 Hawthorne Street San Francisco, CA 94105 (415) 972-3522 (415) 744-1873 FAX

EPA Region 10 (Alaska, Idaho, Oregon, Washington)

## Ralph Vaga

vaga.ralph@epa.gov US EPA - Region 10 1200 6<sup>th</sup> Avenue Seattle, WA 98101 (206) 553-5171 (206) 553-0119 FAX

## VIII. OTHER INFORMATION

For further information about the nutrient program, please see the nutrient criteria website, located at:

http://www.epa.gov/waterscience/standards/nutrien t.html